m

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,479	08/23/2001	Yoko Fujiwara	018656-241	8426

7590 10/19/2004

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER	
BRIER, JEFFERY A	
ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/934,479	FUJIWARA ET AL.	
	Examiner	Art Unit	
	Jeffery A Brier	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Response to Amendment

1. The amendment filed on 7/20/2004 has been entered.

Response to Arguments

2. Applicants arguments filed on 7/20/2004 have been considered, however, they are not persuasive.

Applicants arguments are centered upon the amendment made to claims 1, 9, 17, and 27, see page 11 first and second full paragraphs. Applicants position is incorrect because at column 8 lines 29-34 Fukui states "Thirdly, in a case in which a maximum number of pages are dictated, such as conference proceedings, the incorporation of the rules to select appropriate magnifications for each element as in the above can be utilized for adjusting the sizes of the subordinate elements so that the document can be fit into the available space.". Thus, the reconstructed document has an area less than the total area of the document before reconstruction because at least the subordinate elements were reduced in area.

The entire image reconstructed in Fukui includes characters and/or figures because the claims, see claims 1-40, and description, see column 4 lines 31-40 and column 8 lines 21-25, of Fukui are directed to a document having sentence elements, which include numerals and letters, and figure elements. Sentence elements inherently include the claimed characters since numerals and letters are characters. Therefore Fukui teaches "an entire image including characters and/or figures". The scanned

image shown in figure 17 includes characters and/or figures and this scanned image is reconstructed to form a document having less area than the original documents area.

Claims 28-31 claim that an area of the reconstructed document blocks is the same as a total area of the extracted document data. Applicant argues that since Fukui discloses in Figure 17 reducing the total area of the extracted document data from more than two pages to two pages that Fukui does not teach the feature of claims 21-31. This argument is not persuasive because Fukui teaches to one of ordinary skill in the art the following: enlarging the area of the extracted document to fit an enlarged document area, reducing the area to the extracted document to fit a reduced document area, and maintaining the area of the extracted documents when its area is the same as the desired document area. Column 3 line 65 to column 4 line 5 teaches this because a "prescribed layout pattern" includes a layout area that is larger than the document's layout area, includes a layout area that is smaller that the document's layout area, and includes a layout area that is the same size a the document's layout area.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 28-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28-31 are indefinite because their parent claims clearly claim the reconstructed document blocks are together less than the entire character and/or figure portion of the entire image while these dependent claims claim the reconstructed area of the documents blocks is the same as a total area of the extracted document blocks. If the parent claims claim the area is less then it is not clear what the dependent claim is actually claiming when it claims the area is the same. When the dependent claim and parent claim are combined to form one claim, the claim claims the area is less and the area is the same. Thus, it is not clear if the area is less or the same. Additionally it is not clear if the dependent claim's area corresponds to the parent claim's entire character and/or figure portion of the entire image.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukui et al., U.S. Patent No. 5,179,650.

Both applicant's system and Fukui's system scans a newspaper or similar document, analyzes the document's characters, drawings, and photos, alters the block containing the characters which is a portion of the entire scanned image, and alters the

layout of the characters in the altered block. Fukui further teaches with regard to figure 17 processing the character, drawings and photo blocks and reconstructing the character, drawings and photo blocks into an area of two pages which is less than the entire image of three pages. Applicant needs to further amend claims 1, 9, 17, and 27 to distinguish the claims from Fukui.

A detailed analysis of the claims follows.

Claim 1:

Fukui teaches an image processing device (*see figure 1*) comprising:

extraction means (*scanner 10, column 3 lines 17-24 describes input unit 10 as a scanner*) for extracting one or more a document blocks (*Figure 17 shows several blocks of the image extracted to perform individual processing on each block.*), wherein each block contains a specific image (*column 3 lines 17-24 further describes article data which is character data, graphic data and image data*) to be processed (*the block containing the characters it to be processed*) from among a portion of an entire image (*Each block is from a portion of the image. Each block containing the characters or graphics or image is a portion of the entire scanned image.*) including character and/or figures (*See column 4 lines 31-40 and column 8 lines 21-25, of Fukui are directed to a document having sentence, numerals and letters,*

elements and figure elements. Sentence elements inherently include the claimed characters since letters are characters.);

recognition means for recognizing character code from a character image within the document block (*step 103 extracts numeral codes and other character like codes, column 4 lines 43-44, in Fukui's system scanner 10 scans the image of the document in order to be able to perform the analysis of the image data to determine key word and number of letters, character codes would have to be known for the article data, column 8 lines 11-28*);

reconstruction means for reconstructing the document blocks in a specific shape *(figures 15A, 15B, and 15C illustrates reconstructing the article block to better fit the document page, figure 2b illustrates a flowchart depicting the processing performed in the means of figure 1 for determining the layout article block*) based on the extracted document blocks (*the block containing the characters is an extracted document block portion of the entire scanned image*), wherein the reconstructed document blocks are together less than the entire character and/or figure portion of the entire image (*Figure 17 shows and column 8 lines 29-45 describes how the scanned blocks on the three pages are reorganized by the processing onto two pages. Thus, the blocks of the entire image are now reconstructed into less than the entire image of three pages. Note column 8 lines*

29-34 describes the reconstructed document has an area less than the total area of the document before reconstruction because at least the subordinate elements were reduced in area.); and

layout means for laying out character code data corresponding to the character code recognized by the recognition means within the reconstructed document blocks (*the article data represented by numeral codes, character codes, is laid out to fit the reconstructed article block*).

The discussion of claims 2-27 is the same as provided in the previous rejection.

Claim 2:

Fukui teaches an image processing device as claimed in claim 1, wherein

the extraction means extracts a plurality of document blocks (*column 3 lines 27-43 describes the many blocks in the image, titles, headers, articles, sections*), and

the reconstruction means arranges the plurality of extracted document blocks into a single block (*see figures 15A, 15B, and 15C)* reconstructed to the specific shape (*one page of the document*).

Claim 3:

Fukui teaches an image processing device as claimed in. claim 1, wherein the specific image includes a character image of a headline (*title*) and a character image of body text (*article corresponding to the title*) corresponding to the headline.

Claim 4:

Fukui teaches an image processing device as claimed in claim 3, further comprising headline character (*title*) arrangement means (*steps 115-118*) for arranging character code data corresponding to the character image of the headline at a specific position within the reconstructed document block.

Claim 5:

Fukui teaches an image processing device as claimed in claim 1, wherein the reconstruction means adjusts a vertical or horizontal dimension (*figures 15A, 15B, and 15C show one long column becoming two columns of the same vertical and horizontal dimensions*) of the document block to a length approximating a natural integer multiple of a length (*vertical or horizontal*) of one column of multiple columns formed within the document block.

Claim 6:

Fukui teaches an image processing device as claimed in claim 1, further comprising file generation means for generating an electronic file storing the character code data laid out by the layout means (*display unit 90 displays the output of step 119, since figure 2b performs many processes on many characters, see step 113, before step 119 occurs an electronic file for storing the character codes is needed to accumulate the results of the steps 111-118*).

Claim 7:

Fukui teaches an image processing device as claimed in claim 1, further comprising a printer (*column 4 line 13*) for printing the character code data laid out by the layout means (*column 7 lines 64-68*) on recording substrate (*inherently the printer prints on paper which is a recording substrate since the paper maintains the image of the characters*).

Claim 8:

Fukui teaches an image processing device as claimed in claim 1, further comprising a reader (column 3 line 23 describes data input unit 10 as a scanner which inherently is a reader of images on a substrate) for optically reading (since the documents scanned are readable by humans then the scanner is optical) an image (*illustrated in figures 3A, 3B and 3C*) of a document to obtain the image data to be processed.

Claim 9:

Claim 9 is a program for causing a computer to execute image processing claim which corresponds to image processing device claim 1 and claims the same functions that claim 1 claims, thus, claim 9 is rejected for the reasons given for claim 1. This application is directed to computers, see column 1 lines 17-25, additionally Fukui's figure 1 illustrates a computer since it computes and the flowcharts illustrated in Fukui's figures 2a and 2b represent a program that controls the computer of figure 1.

Claims 10-16:

Claims 10-16 correspond respectively to claims 2-8, thus, claims 10-16 are rejected for the reasons given for claims 2-8.

Claim 17:

Claim 17 is an image processing method claim corresponding to the functions performed by computer program claim 9 and image processing device claim 1, thus, claim 17 is rejected for the reasons given for claims 1 and 9.

Claims 18, 21 and 24:

Fukui at column 3 lines 17-24 and 27-43 describes the input data as article data, graphic data and image data which are classified according to distinct physical, structural, and denotative characteristics of different parts of a document to be edited. Column 5 lines 4-9 and column 8 lines 29-45 described detecting various areas of the scanned document and processing each area separately to fit resized blocks. Each of the different areas of the document corresponding to different articles, graphics, and images are visually different from each other. For example an image such as element 6 and another image such as element 7 illustrated in figure 17 are visually different, thus, they are a marked portion of the entire image. Therefore, Fukui teaches the claimed wherein the extracted document block is a marked portion of the entire image. This claim broadly claims a marked portion, thus, the visual differences between a portion of

the image having text and a portion of the image having a figure meets the limitation of marked. The claim does not claim the specific mark described at page 9 lines 12-23.

Claims 19, 22 and 25:

Column 4 lines 31 to column 5 line 3 discusses steps 102-104 which analyzes the title and the document, thus, Fukui teaches analyzing the title and body of text as a character block while the graphics and image blocks are analyzed in different portions with regard to the discussion of figure 17 at column 8 lines 29-45. Therefore, Fukui teaches the claimed wherein the extracted document block also includes a photographic image area that is extracted and laid out with the character code data.

Claims 20, 23 and 26:

Column 5 lines 4-11 describes a document formed by articles which is character data and graphics which is at least photographic image data as being processed to form a document with graphic data and character data. Therefore, Fukui teaches the claimed wherein the extracted document block also includes a photographic image area that is extracted and laid out with the character code data.

Claim 27:

This claim is an device claim version of claim 1 which claims the same functions that claim 1 claims. This claim is rejected for the reasons given for claim 1. Additionally

Fukui teaches the unit limitations of the claim because Fukui is a apparatus that is formed of units performing functions.

Claim 28:

Fukui teaches an image processing device as claimed in claim 1, wherein an area of the reconstructed document blocks is the same as a total area of the extracted document blocks (*Fukui teaches to one of ordinary skill in the art the following: enlarging the area of the extracted document to fit an enlarged document area, reducing the area to the extracted document to fit a reduced document area, and maintaining the area of the extracted documents when its area is the same as the desired document area. Column 3line 65 to column 4 line 5 teaches this because a "prescribed layout pattern" includes a layout area that is larger than the document's layout area, includes a layout area that is smaller that the document's layout area, and includes a layout area that is the same size a the document's layout area.*).

Claims 29-31:

These claims claim the same function that claim 28 claims and these claims are rejected for the same reasons given for claim 28.

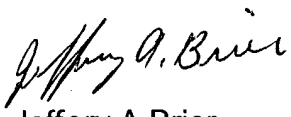
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is 703-305-4723. The examiner can normally be reached on M-F from 6:30 to 3:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffery A Brier
Primary Examiner
Art Unit 2672